

Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

Monthly Progress Report October 2005

Toll Bridge Program Oversight Committee



California Department of Transportation



Bay Area Toll Authority

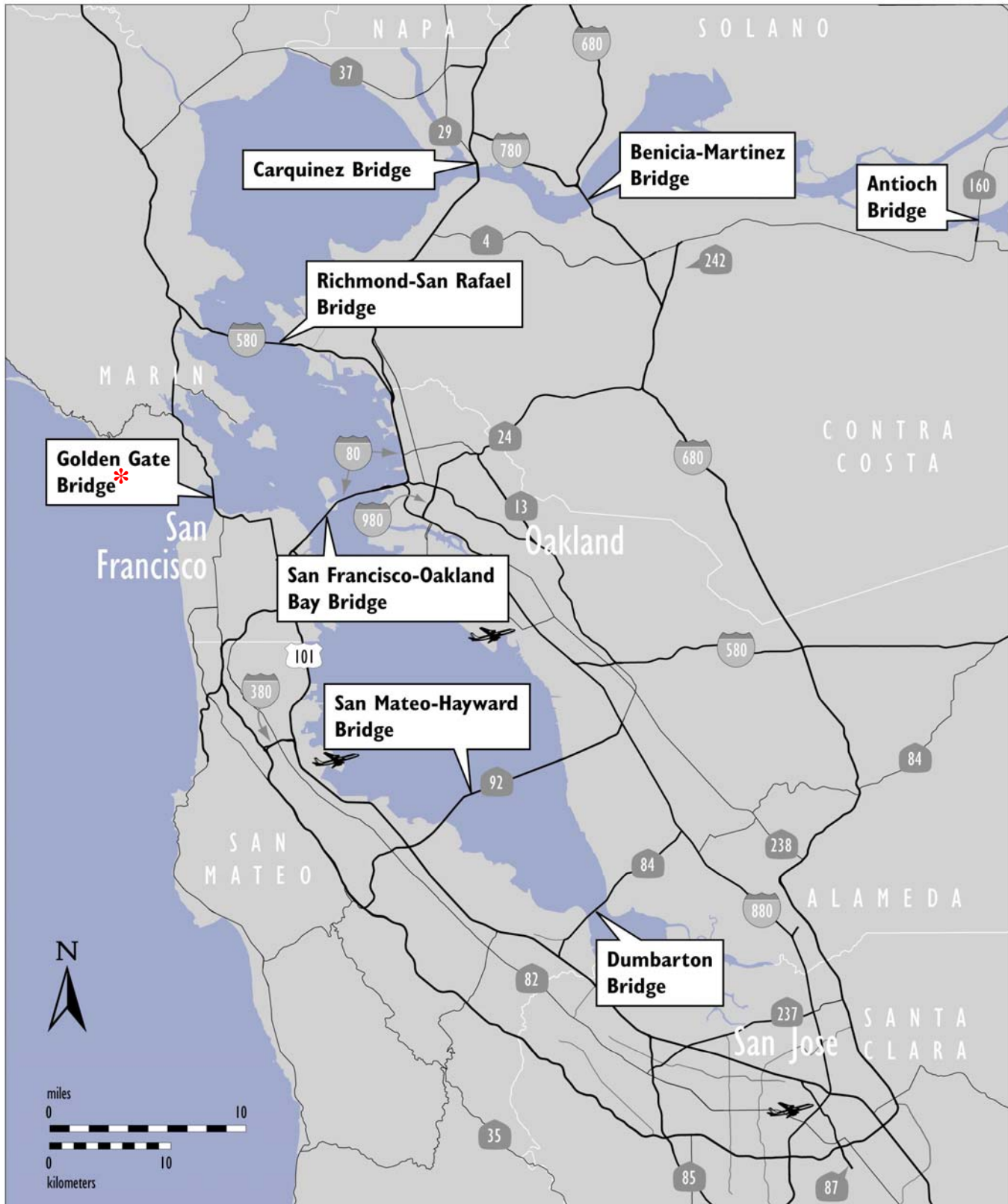


California Transportation Commission

TABLE OF CONTENTS

Introduction	1
Executive Summary	2
<i>Toll Bridge Seismic Retrofit Program—Cost</i>	<i>2</i>
<i>Toll Bridge Seismic Retrofit Program—Schedule</i>	<i>3</i>
<i>Regional Measure 1 Program—Cost</i>	<i>4</i>
<i>Regional Measure 1 Program—Schedule</i>	<i>5</i>
Project / Contract Reports.....	7
<i>San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary.....</i>	<i>8</i>
Skyway Contract	10
Self-Anchored Suspension (SAS) Superstructure Contract.....	12
Self-Anchored Suspension (SAS) E2/T1 Foundation Contract.....	14
Yerba Buena Island (YBI) South/South Detour Contract.....	16
Other Major Contracts in Design.....	18
Other Completed Contracts and Related Work	20
<i>San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project.....</i>	<i>22</i>
<i>Richmond-San Rafael Bridge (RSRB) Seismic Retrofit Project</i>	<i>24</i>
<i>Other Completed Seismic Retrofit Projects.....</i>	<i>25</i>
<i>Other Toll Bridges.....</i>	<i>26</i>
Project / Contract Reports.....	29
<i>New Benicia-Martinez Bridge Project Summary.....</i>	<i>30</i>
New Benicia-Martinez Bridge Contract	32
Other Contracts and Related Project Activities	34
<i>New Carquinez Bridge Project.....</i>	<i>36</i>
<i>Richmond-San Rafael Bridge (RSRB) Trestle, Fender, and Deck Joint Rehabilitation Project.....</i>	<i>38</i>
<i>Richmond-San Rafael Bridge (RSRB) Deck Overlay Project.....</i>	<i>39</i>
<i>Interstate 880/State Route 92 Interchange Reconstruction Project.....</i>	<i>40</i>
<i>Other Completed Regional Measure 1 (RM1) Projects.....</i>	<i>41</i>
Appendices.....	43
<i>Appendix A: Toll Bridge Seismic Retrofit Program:</i>	
<i>San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail.....</i>	<i>44</i>
<i>Appendix B: Toll Bridge Seismic Retrofit Program Cost Detail</i>	<i>46</i>
<i>Appendix C: Toll Bridge Seismic Retrofit Program Summary Schedule.....</i>	<i>47</i>
<i>Appendix D: Regional Measure 1 Program Cost Detail.....</i>	<i>48</i>
<i>Appendix E: Regional Measure 1 Program Summary Schedule</i>	<i>51</i>

Toll Bridges of the San Francisco Bay Area



* Under the Jurisdiction of the Golden Gate Bridge, Highway and Transportation District

INTRODUCTION

In July 2005, Assembly Bill 144, Hancock (AB 144) created the Toll Bridge Project Oversight Committee (TBPOC) to implement a project oversight and project control process for the Benicia-Martinez Bridge project and the state toll bridge seismic retrofit program projects. Comprised of the Caltrans Director, the Bay Area Toll Authority (BATA) Executive Director and the Executive Director of the California Transportation Commission (CTC), the TBPOC's project oversight and control processes include but are not limited to reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the committee) and preparing project reports.

AB 144 identified the Toll Bridge Seismic Retrofit Program and the new Benicia-Martinez Bridge Project as under the direct oversight of the TBPOC. The Toll Bridge Seismic Retrofit Program includes:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Construction
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
Eastbound Carquinez Bridge Seismic Retrofit	Complete
Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

The new Benicia-Martinez Bridge is part of a larger program of toll-funded projects, called the Regional Measure 1 (RM1) Toll Bridge Program, under the responsibility of the BATA. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans (CT) will continue to report on their progress as an informational item. The RM1 program includes:

RM1 Projects	Open to Traffic Status
New Benicia-Martinez Bridge	Construction
1927 Carquinez Bridge Demolition	Construction
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Design
Interstate 880/State Route 92 Interchange Reconstruction	Design
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

This report focuses on identifying critical project issues and monitoring project cost and schedule performance for the projects as measured against approved budgets and schedule milestones. This report is intended to fulfill Caltrans' requirement to provide monthly project progress reporting to the TBPOC under Section 30952.05 of the Streets and Highway Code.

EXECUTIVE SUMMARY

Toll Bridge Seismic Retrofit Program—Cost (\$Millions)

Project	Work Status	AB 144 Budget	Approved Changes	Current Budget	Actual Cost To Date (09/2005)	Estimate at Completion	At-Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	i
SFOBB East Span Replacement Project								
Capital Outlay Support		960	-	960	385	977	17	●
Capital Outlay Construction								
Skyway	Construction	1,293	-	1,293	911	1,293	-	●
SAS Superstructure	Advertise	1,754	-	1,754	-	1,767	14	●
SAS E2/T1 Foundations	Restart	314	-	314	66	314	-	●
YBI Transition Structures	Design	299	-	299	-	318	19	●
Oakland Touchdown	Design	284	-	284	-	273	(11)	●
South/South Detour	Design/Const	132	-	132	28	134	2	●
Existing Bridge Demolition	Design	239	-	239	-	222	(17)	●
Stormwater Treatment Measures	Design	15	-	15	-	15	-	●
East Span Completed Projects		90	-	90	89	90	-	
Right-of-Way and Environmental Mitigation		72	-	72	39	72	-	●
Other Budgeted Capital		35	-	35	-	11	(24)	
Total SFOBB East Span Replacement Project		5,487	-	5,487	1,517	5,487	-	
SFOBB West Approach Replacement	Construction							●
Capital Outlay Support		120	-	120	68	120	-	
Capital Outlay Construction		309	-	309	157	309	-	
Total SFOBB West Approach Replacement		429	-	429	225	429	-	
Richmond-San Rafael Bridge Retrofit	Construction							●
Capital Outlay Support		134	-	134	122	127	(7)	
Capital Outlay Construction		780	-	780	657	698	(82)	
Project Reserves		-	-	-	-	89	89	
Total Richmond-San Rafael Bridge Retrofit		914	-	914	779	914	-	
Program Completed Projects	Complete							
Capital Outlay Support		220	-	220	219	220	-	
Capital Outlay Construction		706	-	706	702	706	-	
Total Program Completed Projects		925	-	925	922	925	-	
Miscellaneous Program Costs		30	-	30	25	30	-	
Program Contingency		900	-	900	-	900	-	
Total Toll Bridge Seismic Retrofit Program		8,685	-	8,685	3,467	8,685	-	

● Within Approved Schedule and Budget

● Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation

● Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming

Note: Details may not sum to totals due to rounding effects.

Toll Bridge Seismic Retrofit Program—Schedule

Project	Project Complete AB 144 Baseline	Project Complete Forecast	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d = c - b	e	f
SFOBB East Span Replacement Project					
Skyway	Apr 07	Apr 07	-	●	Fabrication issues concerning the Skyway hinge pipe beams could impact project schedule and budget. See page 10
SAS Superstructure	Mar 12	Mar 12	-	●	This contract is being re-advertised. See page 12.
SAS E2/T1 Foundations	Jun 08	Jun 08	-	●	The suspension of work on this contract has been lifted. Caltrans is negotiating revised cost and schedule for project. See page 14.
YBI Transition Structures	Nov 13	Nov 13	-	●	
Oakland Touchdown	Nov 13	Nov 13	-	●	
YBI South/South Detour	Jul 07	Jul 07	-	●	
Existing Bridge Demolition	Sep 14	Sep 14	-	●	
Stormwater Treatment Measures	Mar 08	Mar 08	-	●	
<i>Open to Traffic Date: West Bound</i>	<i>Sep 11</i>	<i>Sep 11</i>	-	●	
<i>Open to Traffic Date: East Bound</i>	<i>Sep 12</i>	<i>Sep 12</i>	-	●	
SFOBB West Approach Replacement	Aug 09	Aug 09	-	●	
Richmond-San Rafael Bridge Retrofit	Aug 05	Oct 05	2	●	Seismic retrofit completed July 29, 2005. Formal acceptance of this contract in October 2005.

Regional Measure 1 Program—Cost (\$Millions)

Project	Work Status	July 2005 Budget	Approved Changes	Current Budget	Actual Cost To Date (09/2005)	Estimate at Completion	At-Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	i
New Benicia-Martinez Bridge Project	Construction							●
Capital Outlay Support		157	-	157	137	178	21	
Capital Outlay Construction		863	-	863	698	1,005	142	
Capital Outlay Right-of-Way		20	-	20	12	20	0	
Project Reserve		20	-	20	-	60	40	
Total New Benicia-Martinez Bridge Project		1,060	-	1,060	847	1,263	203	
Carquinez Bridge Replacement Project	Construction							●
Capital Outlay Support		124	-	124	113	125	1	
Capital Outlay Construction		381	-	381	345	383	2	
Capital Outlay Right-of-Way		10	-	10	10	10	-	
Project Reserve		12	-	12	-	9	(3)	
Total Carquinez Bridge Replacement Project		528	-	528	468	528	0	
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Design							●
Capital Outlay Support		8	-	8	1	8	-	
Capital Outlay Construction		17	-	17	-	21	4	
Project Reserve		-	-	-	-	-	-	
Total Richmond-San Rafael Bridge Deck Overlay Rehabilitation		25	-	25	1	29	4	
I-880/SR-92 Interchange Reconstruction	Design							●
Capital Outlay Support		29	-	29	25	43	14	
Capital Outlay Construction		95	-	95	-	119	24	
Capital Outlay Right-of-Way		10	-	10	7	13	3	
Project Reserve		0	-	0	-	11	11	
Total I-880/SR-92 Interchange Reconstruction		134	-	134	32	186	52	
Program Completed Projects	Complete							
Capital Outlay Support		54	-	54	54	56	2	
Capital Outlay Construction		307	-	307	289	296	(11)	
Capital Outlay Right-of-Way		2	-	2	1	1	(1)	
Project Reserve		2	-	2	0	1	(1)	
Total Program Completed Projects		365	-	365	344	353	(11)	
Total Regional Measure 1 Program		2,112	-	2,112	1,693	2,360	248	

● Within Approved Schedule and Budget

● Potential Cost and Schedule Impacts

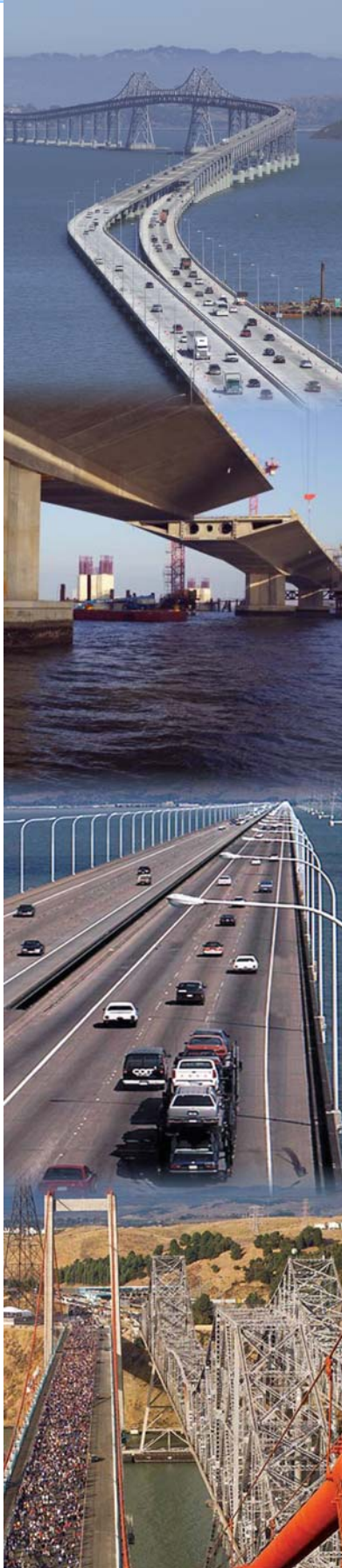
● Known Cost and Schedule Impacts

Note: Details may not sum to totals due to rounding effects.

Regional Measure 1 Program—Schedule

Project	Project Complete Baseline	Project Complete Forecast	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d = c - b	e	f
New Benicia-Martinez Bridge Project	Dec 07	Dec 07	–	●	Construction issues will impact the cost/schedule for this project. See page 32.
1927 Carquinez Bridge Demolition Project	Dec 07	Sep 07	(3)	●	
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Jan 07	Jan 07	-	●	
I-880/SR-92 Interchange Reconstruction	Nov 10	Dec 10	1	●	Environmental clearance issues have impacted the cost/schedule for this project. See page 40.

**This Page
Intentionally
Left Blank**



PROJECT / CONTRACT REPORTS

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

- Skyway Contract
- Self-Anchored Suspension (SAS) Superstructure Contract
- Self-Anchored Suspension (SAS) E2/T1 Foundation Contract
- Yerba Buena Island (YBI) South/South Detour Contract
- Other Major Contracts in Design
- Other Contracts and Related Project Work

San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

Richmond-San Rafael Bridge Seismic Retrofit Project

Other Completed Seismic Retrofit Projects

Toll Bridge Seismic Retrofit Program

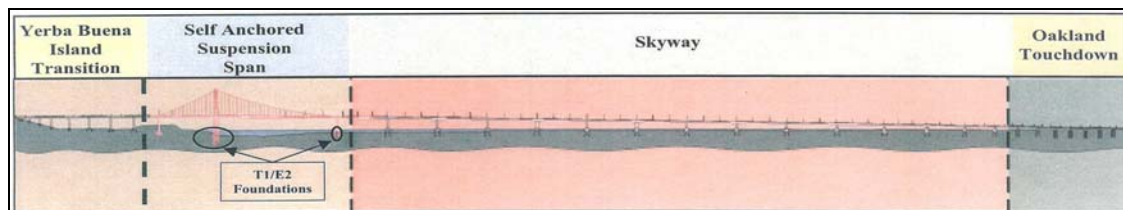
San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

Project Description: The East Span will be seismically retrofitted through the complete replacement of the existing span. The remaining effort for this project consists of the following contracts: Skyway—construction of two parallel concrete structures, each approximately 1.3 miles in length; Self-Anchored Suspension (SAS) Foundation—construction of marine foundations; SAS Superstructure—construction of a self-anchored 385-meter main span superstructure incorporating a 160-meter fabricated structural steel tower with a main cable and inclined suspenders that will support steel orthotropic decks; Yerba Buena Island (YBI) South/South Detour—design and construction of a temporary double-deck bypass structure that will allow traffic to cross the existing SFOBB while completing the westerly permanent tie-in structure of the new East Span at Yerba Buena Island; YBI Structures—construction of a new structure connecting the western end of the self-anchored suspension to the Yerba Buena Island viaduct, which will be retrofitted; Oakland Touchdown—at the Oakland end of the East Span, construction of two parallel, cast-in-place post-tensioned concrete viaducts, which join the skyway to the at-grade Oakland approach fill; Existing Bridge Demolition—demolition of the existing 1936 SFOBB East Span structure after the construction and placement of traffic onto the new East Span.

SFOBB East Span Replacement Cost Summary (\$Millions)

Contract	AB 144 Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at * Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	960	-	960	385	977	17
Capital Outlay Construction						
Skyway	1,293	-	1,293	911	1,293	-
SAS Superstructure	1,754	-	1,754	-	1,767	13
SAS E2/T1 Foundations	314	-	314	66	314	-
YBI Structures	299	-	299	-	318	19
Oakland Touchdown	284	-	284	-	273	(11)
YBI South/South Detour	132	-	132	28	134	2
Existing Bridge Demolition	239	-	239	-	222	(17)
Stormwater Treatment Measures	15	-	15	-	15	-
East Span Completed Projects	90	-	90	89	90	-
Right-of-Way and Environmental Mitigation	72	-	72	39	72	-
Other Budgeted Capital	35	-	35	-	11	(24)
TOTAL	5,487	-	5,487	1,517	5,487	-

Note: Details may not sum to totals due to rounding effects.



SFOBB East Span Replacement Project

SFOBB East Span Replacement Schedule Summary

Contract	Baseline Project Completion Date	Forecast Project Completion Date	Variance (Months)
Skyway	April 2007	April 2007	-
YBI South / South Detour	July 2007	July 2007	-
Stormwater Treatment Measures	March 2008	March 2008	-
SAS E2/T1 Foundations	June 2008	June 2008	-
Open to Traffic: West Bound	September 2011	September 2011	-
SAS Superstructure	March 2012	March 2012	-
Open to Traffic: East Bound	September 2012	September 2012	-
Oakland Touchdown	November 2013	November 2013	-
YBI Transition Structure	November 2013	November 2013	-
Existing Bridge Demolition	September 2014	September 2014	-

Project Status: Construction is currently ongoing on the Skyway and the YBI South/South Detour contracts. The SAS E2/T1 Foundation contract is currently in the process of restarting, and the SAS Superstructure contract has been re-advertised. See the following contract detail pages for more information. As part of an ongoing cost review process, Caltrans is reporting changes to the Estimate at Completion amounts for the project. Currently, these charges can be funded from contingencies in Other Budgeted Capital.

Project Issues: The results of the preliminary SAS and E2-T1 quantitative schedule risk analysis indicate that there is approximately an eighty percent probability that the SAS contract date of completion may be extended (whether by contractor, third party, weather, owner, or other excusable delay) by up to 21 months from the AB 144 schedule. It should be noted that this preliminary probabilistic schedule analysis does not consider many of the schedule risk responses subsequently identified and implemented, such as implementation of the fabrication action and solution team (FAST), potential Jones Act clarifications, and ongoing SAS contract addenda enhancements. Moreover, about half of the contract extension potential relates to the submission and review of tower shop drawings, and the fabrication and delivery of the lower tower sections. Contentious issues regarding quality and code interpretations may arise during review of shop drawings. There is considerable welding involved in the fabrication of the tower sections, giving rise to possible issues due to tight tolerances and different interpretations of welding codes and welding sequences. While these delay potentials exist now, there are risk responses such as FAST, the campus concept for integrating supplier/fabricator/Caltrans teams, and a review of the COS resources that can mitigate many of the delay-causing possibilities. As these responses will be implemented, their effectiveness in reducing the delay risks will be reassessed, and the schedule delay risk will be adjusted accordingly. Caltrans and TBPOC are and will be taking affirmative actions to mitigate any potential issues that may lead to schedule delays as described in the risk management plan.

Recent TBPOC Actions: In July, the TBPOC approved the restart of the SAS E2/T1 Foundation contract and recommended to the Bay Area Toll Authority the re-advertisement of the SAS Superstructure contract. See the following contract detail pages for more information.

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► SKYWAY CONTRACT

Contract Description: The Skyway contract constructs two parallel pre-cast concrete approach spans from Oakland to the self-anchored suspension span near Yerba Buena Island.

Skyway Cost Summary (\$Millions)

Contract	AB 144 Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - Skyway						
Capital Outlay Support	197	-	197	113	197	-
Capital Outlay Construction	1,293	-	1,293	911	1,293	-
TOTAL	1,490	-	1,490	1,024	1,490	-

Note: Details may not sum to totals due to rounding effects.

Skyway Schedule Summary

Contract	Baseline Contract Completion Date	Forecast Contract Completion Date	Variance (Months)
East Span - Skyway	April 2007	April 2007	-

Contract Status: The Skyway contract is currently in construction and is 80% complete. Work continues on the two remaining footing boxes that support the bridge. The pier tables on the eastbound structure are complete, while the westbound structure has six pier tables in various stages of construction. The pre-cast yard in Stockton continues casting segments. Segment erection activities are ongoing. To date, 339 of the 452 pre-cast concrete deck sections have been fabricated; 206 have been installed.

Contract Issues:

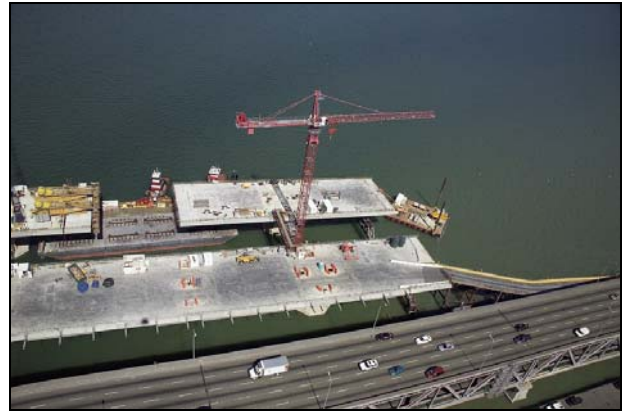
Issue	Mitigating Action
A schedule delay is currently projected by the contractor due to issues with the fabrication of the hinge pipe beams that connect the major frames of the bridge.	While Caltrans is evaluating the contractor's fabrication methodology for the pipe beams, the contractor is currently mitigating the schedule delays by resequencing segment erection activities. The projected delay to the Skyway project is not expected to delay the overall open-to-traffic date for the East Span Replacement project.

Recent TBPOC Actions: None.

Contract Photographs

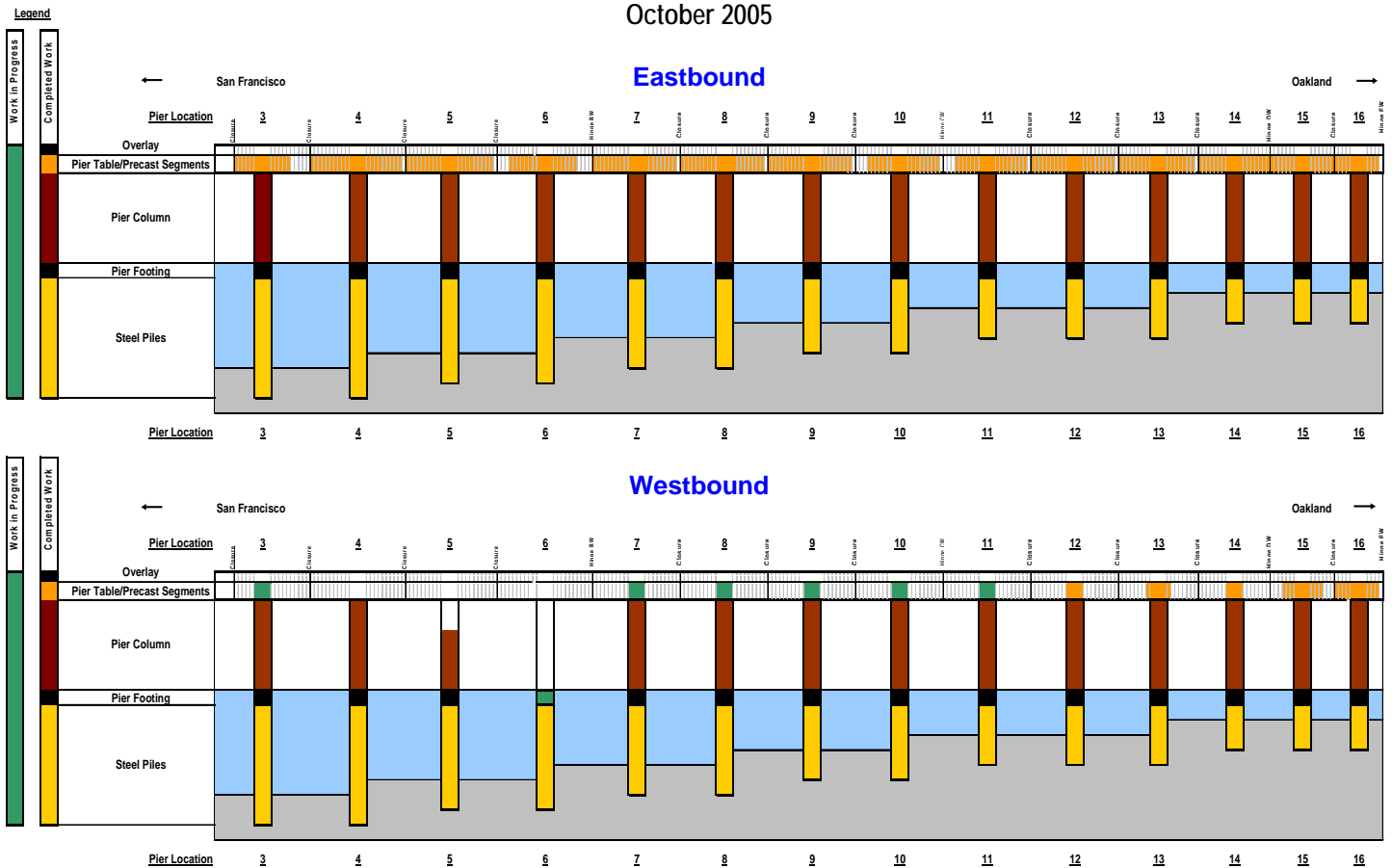


Construction of Westbound Pier Columns (Foreground) and Eastbound Deck



Construction of Eastbound (Foreground) and Westbound Skyway Deck near the Oakland Approach

San Francisco-Oakland Bay Bridge East Span Replacement Project - Skyway Contract October 2005



Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► SELF-ANCHORED SUSPENSION (SAS) SUPERSTRUCTURE CONTRACT

Contract Description: The Self-Anchored Suspension (SAS) Superstructure contract constructs a signature tower span between the skyway and the Yerba Buena Island transition structure. Work on the SAS bridge has been split between three contracts—the SAS Superstructure (in advertisement), the SAS E2/T1 Foundation (under construction), and the SAS W2 Foundation (completed).

SAS Superstructure Cost Summary (\$Millions)

Contract	AB 144 Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - SAS Superstructure						
Capital Outlay Support	215	-	215	14	215	-
Capital Outlay Construction	1,754	-	1,754	-	1,767	13
TOTAL	1,969	-	1,969	14	1,982	13

Note: Details may not sum to totals due to rounding effects.

SAS Superstructure Schedule Summary

Contract	Baseline Contract Completion Date	Forecast Contract Completion Date	Variance (Months)
East Span - SAS Superstructure	March 2012	March 2012	-

Contract Status: The SAS Superstructure Contract was re-advertised on August 1, 2005. Bid opening is scheduled for February 1, 2006. Two contractor outreach sessions were held during August, 2005. A Contractor/Fabricator/Supplier meeting was held on September 23, 2005. Caltrans is currently evaluating and responding to contractor inquiries (197 as of 10/15, 89 posted responses) and preparing addenda to the contract plans and specifications as necessary. Key technical issues being addressed are the following:

- ◆ Caltrans has identified some areas for clarifications to the contract specifications to improve the method of work for the project.
- ◆ Caltrans is currently performing analyses to determine potential specification revisions to be included in addenda.

The estimate-at-completion forecast for the project was increased by \$14 million to cover actions taken to encourage additional bidders for the project, including the increase to the bidder's stipend to \$3 million for the lowest three responsive bidders, and to accelerate delivery of the project, including accelerating working drawing and progress schedule submittals. Currently, these charges can be funded from contingencies in Other Budgeted Capital.

Contract Issues:

Issue	Mitigating Action
Caltrans' Risk Management evaluation of the project identified the potential lack of bidder competition as the greatest risk to maintaining project cost and schedule.	To increase number of bidders, the TBPOC has approved actions to de-federalize the SAS contract, revise the Cost Reduction Incentive Program (CRIP) to be more financially advantageous to contractors, increase the bidder's stipend to \$3 million to the lowest three responsive bidders, and hold additional contractor outreach sessions.

Recent TBPOC Actions:

- ◆ In August, the TBPOC approved SAS contract Addendum 1, which changed the call-in telephone number for the August 16, 2005 Contractor Outreach Meeting.
- ◆ In September, the TBPOC approved SAS contract Addendum 2, which set the Disadvantaged Veteran's Business Enterprise and Small Business goals for the project and made a number of minor technical and environmental regulatory changes to the project.
- ◆ In October 2005, the TBPOC approved Addendum 3, which is comprised of a number of technical specification changes, including revisions based on bidder inquiries.

Contract Photographs

SAS Superstructure Artist Rendition

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► SELF-ANCHORED SUSPENSION (SAS) E2/T1 FOUNDATION CONTRACT

Contract Description: The Self-Anchored Suspension (SAS) E2/T1 Foundation contract constructs the main tower foundation at T1 and the adjacent east foundation at E2.

SAS E2/T1 Foundation Cost Summary (\$ Millions)

Contract	AB 144 Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion *	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - SAS E2 / T1 Foundations						
Capital Outlay Support	53	-	53	7	53	-
Capital Outlay Construction	314	-	314	66	314	-
TOTAL	367	-	367	73	367	-

Note: Details may not sum to totals due to rounding effects.

SAS E2/T1 Foundation Schedule Summary

Contract	Baseline Contract Completion Date	Forecast Contract Completion Date	Variance (Months)
East Span - SAS E2 / T1 Foundations	June 2008	June 2008	-

Contract Status: Work on the project was suspended in January 2005. Approximately 29% of the work on the project was completed prior to the suspension of work. Most of the completed work was the fabrication of steel piles. The original contract cost for the project was \$177 million. On July 29, 2005, Caltrans notified the contractor to restart the work on the project. The proposal for the revised schedule was received from the contractor by September 23, 2005.

Contract Issues:

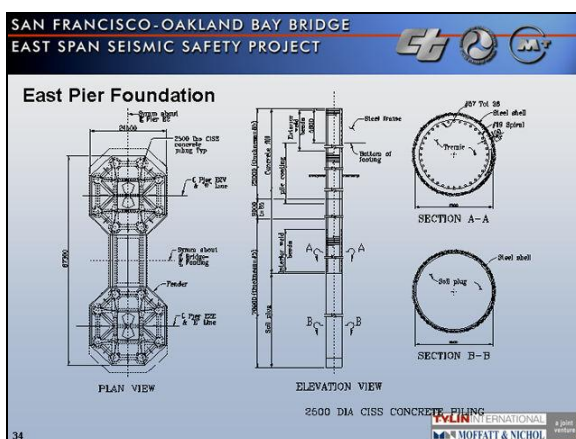
Issue	Mitigating Action
E2/T1 Foundations contract must be completed by March 2008 to avoid impact to the SAS Superstructure Contract.	Caltrans has restarted negotiations. This is a high priority action so that the Contractor can resume all work as quickly as possible. Final negotiations are expected to have a significant impact on the project budget and could impact the schedule of the SAS project.
Gaining firm commitment dates for cost-effective steel delivery from suppliers as part of E2/T1 Foundations restart is critical to resuming work.	Caltrans is focused on staying current with issues concerning the restart of the steel supply, to include replacing suppliers if required.

Recent TBPOC Actions: In July, the TBPOC recommended the restart of the SAS E2/T1 Foundation contract.

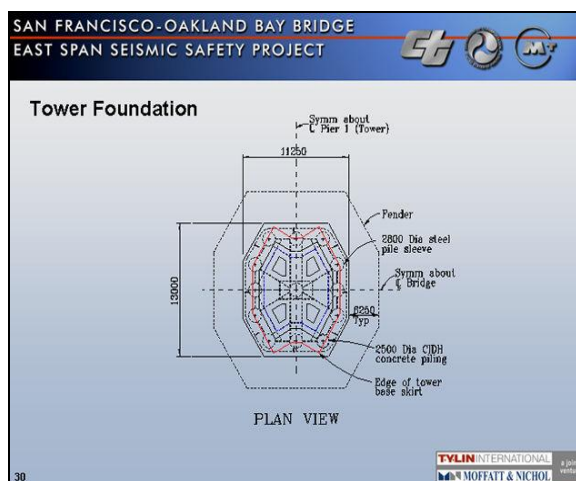
Project Photographs



T1 = Foundation for the 530-foot steel tower
 E2 = Eastern Support of the suspension roadway
 W2 = Western Support of the suspension roadway



East Pier Foundation



Tower Foundation

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project► **YERBA BUENA ISLAND (YBI) SOUTH/SOUTH DETOUR CONTRACT**

Contract Description: The Yerba Buena Island (YBI) South/South Detour Contract constructs a temporary detour from the YBI tunnel to the existing east span of the Bay Bridge. This detour maintains traffic on the existing bridge while the YBI Transition Structure Contract completes the tie-in from the SAS to the existing tunnel.

YBI South/South Detour Cost Summary (\$Millions)

Contract	AB 144 Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
YBI South/South Detour						
Capital Outlay Support	30	-	30	13	30	-
Capital Outlay Construction	132	-	132	28	134	2
TOTAL	162	-	162	41	164	2

Note: Details may not sum to totals due to rounding effects.

YBI South/South Detour Schedule Summary

Contract	Baseline Contract Completion Date	Forecast Contract Completion Date	Variance (Months)
YBI South / South Detour	July 2007	July 2007	-

Contract Status: The contract is 32% complete. To minimize impacts on the traveling public, portions of the East and West Tie-in operations remain suspended. The contract is performance based, whereby the contractor is responsible for both designing and constructing the detour structures. The contractor's engineer continues to perform design work on the east and west tie-in structures for the detour. The \$2 million variance in the South/South Detour contract is due to a potential change in the contract schedule. See Contract Issues below.

Contract Issues:

Issue	Mitigating Action
Delay to the SAS contract due to re-advertising has extended the South/South Detour Contract, so as to integrate with the schedule of the SAS contract.	Caltrans is currently reviewing the project costs and schedule based on the revised SAS E2/T1 Foundation and SAS Superstructure project milestones to determine the optimum project schedule for the South/South Detour contract. A revised schedule for the project will likely increase contract costs.

Recent TBPOC Actions: None.

Contract Photographs

Temporary Bypass Structure (in yellow)



Pier Column Construction for the South-South Detour



Aerial View of Pier Footing and Column Construction for the South-South Detour at the Yerba Buena Island

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► OTHER MAJOR CONTRACTS IN DESIGN

Contract Description: Caltrans is currently designing a number of other major construction contracts that will be necessary prior to opening the new east span, including the Oakland Touchdown and the YBI Transition Structure. Following opening of the new bridge, the existing bridge will be removed with the Bridge Demolition contract.

Other Major Contracts Cost Summary (\$Millions)

Contract	AB 144 Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	239	-	239	29	256	17
Capital Outlay Construction						
YBI Transition Structure	299	-	299	-	318	19
Oakland Touchdown	284	-	284	-	273	(11)
Demolition	239	-	239	-	222	(17)
Stormwater Treatment Measures	15	-	15	-	15	-
Total Capital Outlay Construction	837	-	837	-	828	(9)
TOTAL	1,076	-	1,076	29	1,084	8

Note: Details may not sum to totals due to rounding effects.

Other Major Contracts Schedule Summary

Project	Baseline Project Completion Date	Forecast Project Completion Date	Variance (Months)	Design % Complete
Stormwater Treatment Measures	March 2008	July 2008	4	100
YBI Transition Structure	November 2013	November 2013	-	80
Oakland Touchdown	November 2013	November 2013	-	TBD
Existing Bridge Demolition	September 2014	September 2014	-	10

Contract Status:

Stormwater Treatment Measures: This contract to implement best practices for stormwater runoff treatment will be advertised in early 2006. BATA approved the bid documents for this project for advertisement on October 26, 2005.

Oakland Touchdown: The TBPOC authorized Caltrans to split the Oakland Touchdown project into multiple contracts to accelerate work and to reduce the risk of any of this work impacting the critical path for the project. The first contract would construct all the marine foundation work and west-bound approach work earlier to keep the work off the project's critical path. The second contract would construct the remaining east-bound approach when west-bound traffic is shifted onto the new SAS. The third contract would replace the existing submarine cable from Oakland Touchdown to Treasure Island. The fourth contract would incorporate most of the electrical elements from OTD as well as from other segments of the East Span into a single contract. Due to the

split, the capital outlay forecast for this work has been reduced from \$284 million to \$273 million, saving \$11 million. However, the capital outlay support for the contract was increased to cover the additional work to split the contract and to administer four separate contracts over a longer duration rather than the original single contract. Currently, these charges can be funded from contingencies in Other Budgeted Capital.

YBI Transition Structure: This contract is currently being designed by Caltrans. Caltrans has also initiated a value analysis effort on the project to evaluate the current design. As part of an ongoing cost review process, Caltrans is reporting a \$19 million increase in the Estimate at Completion amounts for the contract. Most of the cost increase is due to a higher estimate for electrical work and scheduling. Currently, these charges can be funded from contingencies in Other Budgeted Capital.

Bridge Demolition: Design work has not yet been initiated for this contract. Caltrans recent budget estimates reduce the budget for the demolition work by \$17 million due to a re-evaluation of the cost escalation rates.

Recent TBPOC Actions: In September, the TBPOC authorized Caltrans to split the Oakland Touchdown project into multiple contracts for advertisement.

Contract Photographs



Artist's Rendition of Oakland touchdown Aerial View

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

► OTHER COMPLETED CONTRACTS AND RELATED WORK

Summary Description: Substantial work has already been performed on the SFOBB East Span Replacement project to facilitate construction of the mainline construction contracts.

Other Contracts and Related Work Cost Summary (\$Millions)

Contract	AB 144 Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	227	-	227	209	227	-
Right-of-Way and Environmental Mitigation	72	-	72	39	72	-
Capital Outlay Construction						
SAS W2 Foundations	26	-	26	26	26	-
YBI/SAS Archeology	1	-	1	1	1	-
YBI - USCG Road Relocation	3	-	3	3	3	-
YBI - Substation and Viaduct	12	-	12	11	12	-
Oakland Geofill	8	-	8	8	8	-
Pile Installation Demonstration Project	9	-	9	9	9	-
Existing East Span Retrofit	31	-	31	31	31	-
Total Capital Outlay Construction Completed	90	-	90	89	90	-
TOTAL	390	-	390	337	390	-

Note: Details may not sum to totals due to rounding effects.

Other Contracts and Related Work Schedule Summary

Project	Actual Project Completion Date
Existing East Span Retrofit	October 1997
Pile Installation Demolition Project	December 2000
YBI / SAS Archaeology	January 2003
Oakland Geofill	April 2003
YBI - USCG Road Relocation	June 2004
SAS W2 Foundations	October 2004
YBI Substation and Viaduct	May 2005

Summary Status: Construction has been completed on the above listed contracts. Caltrans continues to work with various environmental agencies to mitigate any environmental impacts from the project.

Contract Issues: None.

Recent TBPOC Actions: None.

Project Photographs

San Francisco-Oakland Bay Bridge Night View



San Francisco-Oakland Bay Bridge Aerial View

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

Project Description: The SFOBB West Approach Replacement Project will replace the entire west approach structure from the 5th Street to the west anchorage of the existing west spans of the SFOBB while maintaining existing traffic lanes for the weekday commute.

SFOBB West Approach Replacement Cost Summary (\$Millions)

Contract	AB 144 Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
West Approach						
Capital Outlay Support	120	-	120	68	120	-
Capital Outlay Construction	309	-	309	157	309	-
TOTAL	429	-	429	225	429	-

Note: Details may not sum to totals due to rounding effects.

SFOBB West Approach Replacement Schedule Summary

Project	Baseline Project Completion Date	Forecast Project Completion Date	Variance (Months)
West Approach	August 2009	August 2009	-

Project Status: Construction work is 57% complete, which includes mobilization. Seismic retrofitting construction is continuing throughout the project. I-80 demolition operations for frame 7U(N) occurred over five weekends from the end of September through October and are complete. This was a difficult engineering and construction task that had substantial risk. The Department successfully completed this work with no unanticipated impacts to traffic. The success of the work on frame 7U(N) and the lessons learned lend substantial confidence to the project team for future work on frame 8U(N). The contractor has begun the erection of falsework for construction of new frame 7U(N). This work operation is critical to the completion of the west approach. The Harrison Street off-ramp was closed for reconstruction on September 6, 2005, and will remain closed for three years. Demolition of this ramp is scheduled to take place in November.

Project Issues

Issue	Mitigating Action
CCO #95 relates to work being performed on the anchorage in the area of frame 7U(N). It extended the baseline schedule and allows for the monitoring of the integrity of the bridge. This CCO plus supplements is estimated at \$9.8 million in value and includes a contract completion date extension of 59 days.	This CCO can be funded from existing contingency allowance.

Recent TBPOC Actions: In September, the TBPOC approved CCO #71 concerning pile driving issues.

Project Photographs

Tendon Cutting of the Existing West Approach Deck



New I-80 Westbound Crossover



Tendon Cutting of the Existing West Approach Deck



Preparation for the Demolition of Portion of the Existing West Approach Structure

Toll Bridge Seismic Retrofit Program

Richmond-San Rafael Bridge (RSRB) Seismic Retrofit Project

Project Description: The Richmond-San Rafael (RSR) Bridge Seismic Retrofit Project strengthened the existing bridge to withstand the effects of a large seismic event. As part of the retrofit work, Caltrans performed work to strengthen the bridge foundations, replace the existing west trestle, the main channel fenders, and the joint rehabilitation of the bridge deck. (The RM1 work is reported in the RM1 section of the report).

RSRB Seismic Retrofit Cost Summary (\$Millions)

Contract	AB 144 Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
RSRB Seismic Retrofit						
Capital Outlay Support	134	-	134	122	127	(7)
Capital Outlay Construction	780	-	780	657	698	(82)
Project Reserves	-	-	-	-	89	89
TOTAL	914	-	914	779	914	-

Note: Details may not sum to totals due to rounding effects.

* The seismic retrofit contract included work to rehabilitate the bridge deck joints. Although the deck joint work was funded from RM1 toll funds, the work is also eligible for Toll Bridge Seismic Retrofit Program funding. In July 2005, BATA rescinded \$16.9 million in RM1 funds for the deck joint work to make additional RM1 funds available for the New Benicia-Martinez Bridge Project. An equivalent amount of seismic funds will be used on the deck joint work, which is included in the budget above. This issue is also discussed in the RM1 portion of the report on page 38.

RSRB Seismic Retrofit Schedule Summary

Project	Baseline Project Completion Date	Forecast Project Completion Date	Variance (Months)
RSRB Seismic Retrofit	August 2005	October 2005	2

Project Status: Caltrans achieved seismic safety on the bridge in July 2005. Caltrans is expecting at least \$89 million in savings from the AB 144 budget. The construction contract was completed and accepted on October 17, 2005.

Contract Issues: None.

Recent TBPOC Actions: None.



Richmond-San Rafael Bridge ribbon cutting

Toll Bridge Seismic Retrofit Program

Other Completed Seismic Retrofit Projects

Summary Description: Caltrans has already completed the seismic retrofits of the West Spans of the SFOBB, the existing 1958 Carquinez Bridge, the existing Benicia-Martinez Bridge, the San Mateo-Hayward Bridge, and two former toll bridges in southern California.

Other Completed Seismic Retrofit Projects Cost Summary (\$Millions)

Project	AB 144 Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit Project	308	-	308	305	308	-
Carquinez Bridge Retrofit Project	114	-	114	114	114	-
Benicia-Martinez Bridge Retrofit Project	178	-	178	178	178	-
San Mateo-Hayward Bridge Retrofit Project	163	-	163	163	163	-
Vincent Thomas Bridge Retrofit Project	58	-	58	58	58	-
San Diego-Coronado Bridge Retrofit Project	104	-	104	102	104	-
TOTAL	925	-	925	920	925	-

Note: Details may not sum to totals due to rounding effects. Capital Outlay Support and Capital Outlay have been combined.

Other Completed Seismic Retrofit Projects Schedule Summary

Project	Actual Project Completion Date
Vincent Thomas Bridge Retrofit	May 2000
San Mateo-Hayward Bridge Retrofit	June 2000
Carquinez Bridge Retrofit	January 2002
San Diego-Coronado Bridge Retrofit	June 2002
Benicia-Martinez Bridge Retrofit	August 2002
SFOBB West Span Seismic Retrofit	June 2004

Summary Status: Construction has been completed on the above listed projects. The Estimate at Completion amounts shown above include allowances for minor project closeout costs.

Contract Issues: None.

Recent TBPOC Actions: None.

Toll Bridge Seismic Retrofit Program

Other Toll Bridges

The Department has completed its seismic vulnerability studies work for the Antioch and Dumbarton toll bridges.

A Seismic Vulnerability Study is not a complete seismic analysis of the structure, but is an investigation of a few representative bents to determine the likelihood of the need for seismic retrofit. Given the limitations of the vulnerability studies, there is insufficient evidence to conclusively determine the performance of the bridges during a Maximum Credible Event (MCE). A comprehensive seismic analysis based on complete and accurate geotechnical soil data must be performed in order to make a final determination of the level of retrofit required.

Background:

Antioch Bridge. Located 25 miles upstream from the Benicia-Martinez Bridge, the Antioch Bridge on State Route 160 is the only northerly highway connection across the San Joaquin River linking east Contra Costa County to the delta communities of Rio Vista and Lodi. In 1978, a high-level fixed-span structure 1.6 miles long and 40 feet wide with a narrow shoulder in each direction for bicyclists, pedestrians and emergency use replaced the original bridge constructed in 1926. The Antioch Bridge spans the 3,600-foot wide San Joaquin River and extends 4,000 feet onto Sherman Island in Sacramento County to the north and 1,000 feet in Contra Costa County to the south. The Antioch Bridge has a navigational clearance of 135 feet vertically and 400 feet horizontally. Traffic lanes consist of two 12-foot wide lanes for motor vehicles and two 8-foot lanes for pedestrians and bicyclists.

Dumbarton Bridge. In 1978, construction began on the existing Dumbarton Bridge on State Route 84, which was opened to traffic in 1982 at a cost of \$70 million. The Dumbarton Bridge crosses the southern region of San Francisco Bay between the cities of Newark to the east and East Palo Alto to the west, connecting San Mateo and Alameda Counties. It is situated approximately 10 miles south of the San Mateo-Hayward Bridge and 27 miles south of the San Francisco-Oakland Bay Bridge.

The Dumbarton Bridge is a six-lane reinforced concrete structure that is 1.6 miles long with a pedestrian/bicycle lane. The center span, which has a length of 340 feet, provides 85 feet of vertical clearance for the passage of ships.

Need for Study

In 1971, a major earthquake occurred in the San Fernando Valley near Los Angeles and severely damaged several bridges in the area. Following the 1971 Southern California earthquake, Caltrans revised its seismic design practice in order to fully incorporate the experience gained from this event. Past reviews of historic bridge performance during subsequent large California earthquakes indicate bridges designed after 1971 have performed very well and significantly better than pre-1971 bridge designs.

The original designs of the Antioch and Dumbarton Bridges were based on design criteria developed after the 1971 San Fernando Earthquake. In the early 1990's, Caltrans determined that these two structures had the seismic resistant features required by the post 1971 codes and were not likely to be vulnerable during a major seismic event. Since that time, Caltrans has pursued an aggressive seismic research program, and based on the results of this program, again significantly revised its seismic practice. Consistent with recommendations by the Caltrans Seismic Advisory Board, Caltrans regularly reassesses the seismic hazard and performance of its

bridges. Due to the tremendous changes in seismic design practice that have occurred since the design of the Antioch and Dumbarton Bridges, a comprehensive assessment of the potential need and scope for seismic retrofit based on current knowledge is prudent.

Seismic Vulnerability Study

The results of the Seismic Vulnerability Studies indicate that the foundation response governs the performance of the bridges during an MCE and this could result in large foundation rotations. These rotations may result in damage to the superstructure and possible damage to the piles.

A cost estimate, schedule, and risk management plan for a comprehensive seismic analysis is being determined at this time.

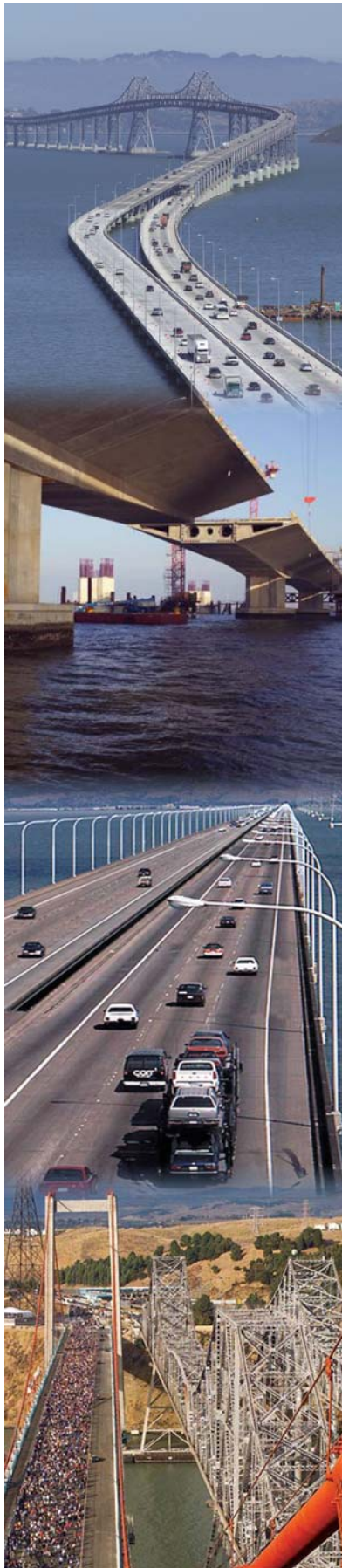


Antioch Bridge



Dumbarton Bridge

**This Page
Intentionally
Left Blank**



PROJECT / CONTRACT REPORTS

Regional Measure 1 Program

New Benicia-Martinez Bridge Project Summary

- New Benicia-Martinez Bridge Contract
- Other Contracts and Related Project Activities

New Carquinez Bridge Project

Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Project

Richmond-San Rafael Bridge Trestle Deck Overlay Project

Interstate 880 / State Route 92 Interchange Reconstruction

Other Completed Regional Measure 1 Projects

- San Mateo-Hayward Bridge Widening Project
- Richmond Parkway Project
- Bayfront Expressway Widening Project

Regional Measure 1 Program

New Benicia-Martinez Bridge Project Summary

Project Description: The new Benicia-Martinez Bridge project constructs a new parallel bridge just east of the existing bridge. The project will include reconstructed interchanges to the north and south of the bridges and a new toll plaza and administration building in Martinez.

New Benicia-Martinez Bridge Project Cost Summary (\$Millions)

Contract	June 2005 BATA Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	157	-	157	137	178	21
Right-of-Way and Others	20	-	20	12	20	0
Capital Outlay Construction						
New Bridge	672	-	672	549	784	112
I-680/I-780 Interchange Replacement	77	-	77	67	92	15
I-680/Marina Vista Interchange Reconstruction	52	-	52	50	55	3
New Toll Plaza	24	-	24	18	26	2
Other	38	-	38	15	48	10
Project Reserve*	20	-	20	-	60	40
TOTAL	1,060	-	1,060	847	1,263	203

Note: Details may not sum to totals due to rounding effects.

** The estimate at completion includes approximately \$38 million in non-toll bridge funds (Proposition 192 and SHOPP).*

New Benicia-Martinez Bridge Project Schedule Summary

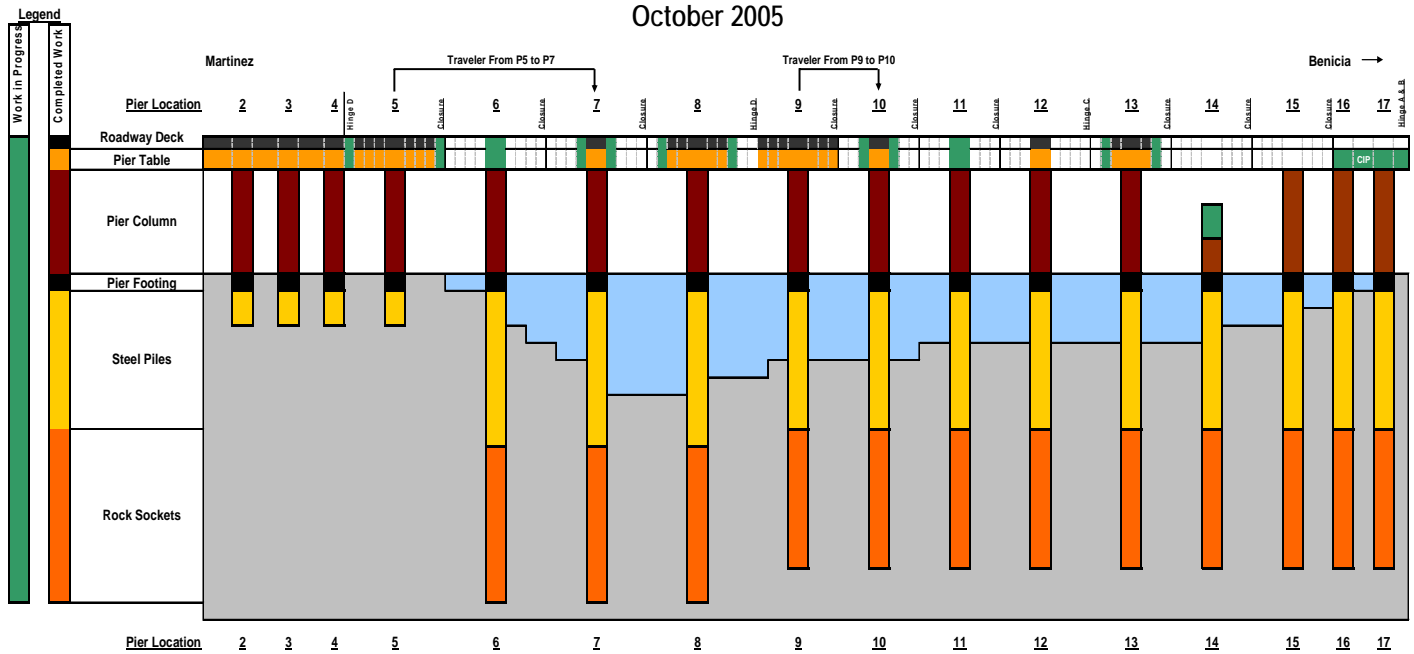
Project	Baseline Project Completion Date	Forecast Project Completion Date	Variance (Months)
I-680/Marina Vista Interchange Reconstruction	March 2006	March 2006	-
New Toll Plaza	June 2006	June 2006	-
New Benicia-Martinez Bridge	December 2007	December 2007	-
I-680/I-780 Interchange Replacement	February 2008	February 2008	-
Open to Traffic	February 2008	February 2008	-

Project Status: All major construction projects necessary to open the bridge are currently in construction. Numerous foundation and superstructure issues have significantly delayed the new bridge contract. See the following contract detail pages for more information.

Project Issues: See the following contract detail pages for more information.

Recent TBPOC Actions: None.

New Benicia-Martinez Bridge Progress Diagram October 2005



Project Photographs



Benicia Toll Plaza - Structural Framing of the canopy at the South end of the Operation Building



Benicia New Bridge - Pier 6 to 17 North

Regional Measure 1 Program

New Benicia-Martinez Bridge Project

► NEW BENICIA-MARTINEZ BRIDGE CONTRACT

Contract Description: The new bridge contract constructs a new cast-in-place segmentally constructed reinforced concrete bridge just east of the existing bridge. The new bridge will carry five lanes of eastbound I-680 traffic towards Benicia.

New Benicia-Martinez Bridge Cost Summary (\$Millions)

Contract	June 2005 BATA Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
New Benicia-Martinez Bridge						
Capital Outlay Support	85	-	85	67	98	13
Capital Outlay Construction	672	-	672	549	784	112
TOTAL	757	-	757	616	882	125

Note: Details may not sum to totals due to rounding effects.

New Benicia-Martinez Bridge Schedule Summary

Contract	Baseline Contract Completion Date	Forecast Contract Completion Date	Variance (Months)
New Benicia-Martinez Bridge	December 2007	December 2007	-

Contract Status: The contract is 79% complete. The superstructure concrete is in place and post tensioned from the south abutment to pier 4, and barrier rail construction is in progress. Superstructure segments are being cast at piers 5, 8, 9 and 13. In order to maintain concrete temperature within the specified limits, cooling tubes are being installed in the segments and a nitrogen station is in operation for cooling the concrete in the delivery trucks. Eighty-two of 344 segments are complete as of August 13, 2005, for the above mentioned piers. Ten tower cranes are installed and operational. Pier table construction continues at piers 6 and 12, and column construction continues at piers 14 and 15. For Frame 4 cast on falsework, barrier rails, approach slab work, isolation casing covers, grading for drainage and slope paving are complete and continuing with dry finish work on exterior. The falsework on Frame 1 is complete up to Pier 17.

Contract Issues

Issue	Mitigating Action
<p>The lightweight concrete mix design is generating an unacceptable amount of heat as it cures; extraordinary measures are being taken to cool the concrete to avoid cracking and extend the life of the bridge. This heat was not anticipated in the project specifications. The cost and schedule impacts of this risk issue are dependent upon the actions taken to mitigate the higher temperatures. This issue may delay completion of the main span.</p>	<p>Actions to lower the temperatures include producing the concrete with ice, introducing liquid nitrogen into the concrete prior to placement, and placing cooling tubes in the concrete elements. Project staff is also evaluating the cost and the critical path schedule to determine opportunities to reduce the cost and time impact of the added measures being taken to lower the temperature of the concrete.</p>
<p>The estimate at completion for the contract is significantly higher than the current budget for the project. As reported to the BATA Oversight Committee in April 2005, Caltrans has identified significant potential cost increases that are due to a number of issues, including delays, lightweight concrete issues, and additional costs for foundation construction joints.</p>	<p>While the potential cost increases have been incorporated into the estimate at completion, BATA continues to work on a comprehensive funding package to cover the cost of the overruns. BATA staff has also directed Caltrans and BATA's consultant team to reforecast the entire project cost to identify any additional costs.</p>

Recent TBPOC Actions: None.

Contract Photographs

Frame 1 Cast on Falsework at Bents 15 to 17 of the New Bridge



Pier 10 Segment Construction with Travelers at Both Ends of the New Bridge

Regional Measure 1 Program

New Benicia-Martinez Bridge Project Summary► **OTHER CONTRACTS AND RELATED PROJECT ACTIVITIES**

Contract Description: Contracts related to the new Benicia-Martinez Bridge project involve the construction of a new toll plaza south of the new bridge in Contra Costa County with 17 toll booths, including two high-occupancy vehicle (HOV) bypass lanes, and the reconstruction of the I-680/Marina Vista Road and I-680/I-780 interchanges.

Other Contracts and Related Activities Cost Summary (\$Millions)

Contract	June 2005 BATA Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	72	-	72	71	80	8
Right-of-Way and Environmental Mitigation	20	-	20	12	20	0
Capital Outlay Construction						
I-680/I-780 Interchange Replacement	77	-	77	67	92	15
I-680/Marina Vista Interchange Reconstruction	52	-	52	50	55	3
New Toll Plaza	24	-	24	18	26	2
Others	38	-	38	15	48	10
Total Capital Outlay Construction	191	-	191	149	221	30
TOTAL	283	-	283	232	321	38

Note: Details may not sum to totals due to rounding effects.

Other Contracts and Related Activities Schedule Summary

Project	Baseline Project Completion Date	Forecast Project Completion Date	Variance (Months)
I-680/Marina Vista Interchange Reconstruction	March 2006	March 2006	-
New Toll Plaza	June 2006	June 2006	-
I-680/I-780 Interchange Replacement	December 2007	December 2007	-

Contract Status:

Toll Plaza and Administration Building: The contract is 77% complete. Work continues on miscellaneous wiring installation and system testing at the Administration Building, as well as installation of miscellaneous electrical work and metal framing for ceiling and fascia of the canopy at the tollbooths. Site work continued at the east and west side of the parking areas next to the Administration Building, and installation of the chain link fence around the main transformer and back flow preventers at the bottom of PK-Line and Mococo Road.

I-680/I-780 Interchange: The contract is approximately 93% complete. All footings, bents, and columns for Bridge 215, which is the northbound I-680 from pier 17, are complete, and superstructure works are in progress. All foundations, bents, and columns for bridges 212 and 214, the westbound I-780 connector, are complete. The deck of bridge 214 will be stressed and grouted by the end of the month. Superstructure work is in progress for bridge 212 and 215.

I-680/Marina Vista Interchange: The contract is approximately 93% complete. The Mococco Overhead is complete, including deck, barrier rail, and expansion joints. Work has been completed on lightweight fill up to abutment 1. Cleaning and grading to return to natural grade is in progress from abutments 9 to 6. Continued pile driving operation, with the installation of cast-in-steel-shell (CISS) piles for Retaining Wall #1.

Wetland Mitigation: The contract is 90% complete and is scheduled for completion in February 2006. Mass excavation between the railroad and Industrial Way, as well as the excavation of the levee across channel A are complete. Sheets from the jacking and receiving pits were pulled and backfilling completed. The excavation of channel A, by the two "water mogs," south of the railroad tracks towards the bay, continued.

Contract Issues

Issue	Mitigating Action
The estimate at completion for the project is significantly higher than the current budget for the project. As reported to the BATA Oversight Committee in April 2005, Caltrans has identified significant potential cost increases due to a number of issues, including delays as a result of the delay to the new bridge contract.	While the potential cost increases have been incorporated into the estimate at completion, BATA continues to work on a comprehensive funding package to cover the cost of the overruns. BATA staff has also directed Caltrans and BATA's consultant team to reforecast the entire project cost to identify any additional costs.

Recent TBPOC Actions: None.

Contract Photographs

Retaining Wall #1 Construction at Marina Vista



215 Approach Structure (North bound I-680)

Regional Measure 1 Program

New Carquinez Bridge Project

Project Description: The new Carquinez Bridge project involves constructing a new suspension bridge west of the existing bridges with four westbound lanes and a bicycle/pedestrian lane and demolishing the existing 1927 bridge.

New Carquinez Bridge Cost Summary (\$Millions)

Contract	June 2005 BATA Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	124	-	124	113	125	1
Capital Outlay Construction						-
Replacement Bridge	253	-	253	253	256	3
South Interchange Reconstruction	74	-	74	72	74	-
Existing 1927 Bridge Demolition	35	-	35	6	35	-
Other	29	-	29	25	28	(1)
Project Reserve	12	-	12	-	9	(3)
TOTAL	528	-	528	468	528	-

Note: Details may not sum to totals due to rounding effects.

New Carquinez Bridge Schedule Summary

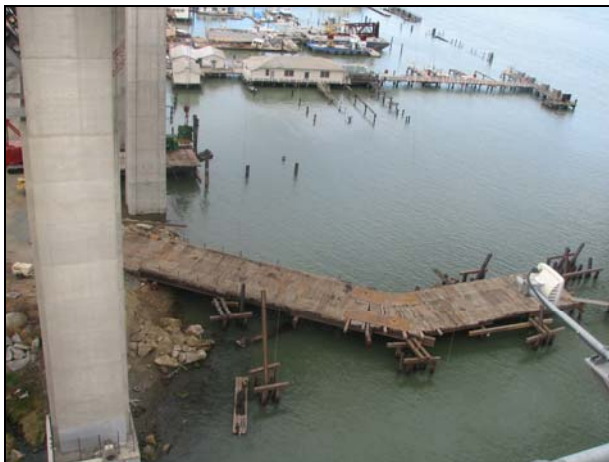
Contract	Baseline Project Completion Date	Forecast Project Completion Date	Variance (Months)
New Carquinez Bridge	November 2003*	November 2003*	-
1927 Carquinez Bridge Demolition	December 2007	September 2007	(3)
Landscaping	August 2011	August 2011	-

* The date shown is for the opening of the bridge to traffic.

Project Status: The replacement bridge and all its approaches are complete and opened to traffic. The 1927 Bridge Demolition contract was awarded on April 4, 2005. The baseline schedule has been submitted and approved. Submittals for the redecking of the 1958 bridge have been approved. A traffic switch for eastbound traffic and associated 1958 bridge deck approach rehabilitation work began on September 26, 2005 and will be completed by October 31, 2005. The re-opening of the bridge is scheduled for November 3, 2005. Demolition of the 1927 bridge will follow.

Project Issues:

Issue	Mitigating Action
On the Replacement Carquinez Bridge Contract, the Contractor has submitted claims for various contract issues, including claims on fabrication, labor, and access.	Caltrans is in the process of evaluating the merits of the final claims. BATA staff will direct BATA's consultant team to also evaluate the claims to determine project risk. Project reserves may need to be used.

Project Photographs*Carquinez Bridge Overview**Stud Bolts and Metal Decking Operation at 1958 Bridge Demolition**1927 Carquinez Bridge Trellis & Falsework Piles**1958 Carquinez Bridge Approach showing Concrete Pouring and Metal Deck Operations**1958 Carquinez Bridge - Nose end of Barrier Rail 1**1958 Carquinez Bridge - New Concrete Deck Overlay (West Approach Ramp)*

Regional Measure 1 Program

Richmond-San Rafael Bridge (RSRB) Trestle, Fender, and Deck Joint Rehabilitation Project

Project Description: This contract involves replacing the western trestle section of the bridge near San Rafael, rehabilitating the ship collision fender system at various piers, and rehabilitation of joints on the bridge deck.

RSRB Trestle, Fender, and Deck Joint Rehabilitation Cost Summary (\$Millions)

Contract	June 2005 BATA Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
RSR Trestle, Fender, and Joint Rehabilitation						
Capital Outlay Support	11	-	11	12	13	2
Capital Outlay Construction	91	-	91	83	84	(7)
Project Reserve	-	-	-	-	-	-
TOTAL	102	-	102	95	97	(5)

Note: Details may not sum to totals due to rounding effects.

The Deck Joint Rehabilitation work is funded from RM1 and from Toll Bridge Seismic Retrofit Program (\$16.9 million) funds. In July 2005, BATA rescinded \$16.9 million in RM1 funds from the deck joint project. An equivalent amount of seismic retrofit funding will be used on the project. This action was taken to make additional RM 1 funds available for the Benicia-Martinez Bridge New Span project. The budget for the Richmond-San Rafael Bridge Seismic Retrofit project, shown on page 24 of this report, includes \$16.9 million of costs for the deck joint rehabilitation work.

RSRB Trestle, Fender, and Deck Joint Rehabilitation Schedule Summary

Contract	Baseline Contract Completion Date	Forecast Contract Completion Date	Variance (Months)
Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation	August 2005	August 2005	-

Project Status: Work on this project is completed.

Project Issues: None

Project Photographs



Repaired Deck Joints-Lower Deck



Richmond-San Rafael Trestle

Regional Measure 1 Program

Richmond-San Rafael Bridge (RSRB) Deck Overlay Project

Project Description: Rehabilitate the existing concrete deck on the bridge, damaged due to traffic and exposure to a marine environment.

RSRB Deck Overlay Cost Summary (\$Millions)

Contract	June 2005 BATA Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
RSR Deck Overlay						
Capital Outlay Support	8	-	8	1	8	-
Capital Outlay Construction	17	-	17	-	21	4
TOTAL	25	-	25	1	29	4

Note: Details may not sum to totals due to rounding effects.

RSRB Deck Overlay Schedule Summary

Contract	Baseline Contract Completion Date	Forecast Contract Completion Date	Variance (Months)
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	January 2007	January 2007	-

Project Status: A fund request was submitted to BATA in September 2005 requesting \$20.5 million for construction. Capital Outlay support is programmed at \$4 million. This project is Ready to List. Design is complete, and this project will be advertised when BATA approves funding for allocation.

Project Issues:

Issue	Mitigating Action
Caltrans has reported a higher than budgeted estimate for the project.	BATA staff will review the revised estimate for the project to determine an appropriate recommendation to BATA. Additional funds maybe allocated from the BATA Toll Bridge Rehabilitation Program.

Project Photographs



RSR Concrete Deck Overlay

Regional Measure 1 Program

Interstate 880/State Route 92 Interchange Reconstruction Project

Project Description: Modify the existing cloverleaf interchange to increase capacity and improve safety and traffic operations.

Interstate 880/State Route 92 Interchange Cost Summary (\$Millions)

Contract	June 2005 BATA Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
I-880/SR-92 Interchange Improvement						
Capital Outlay Support	29	-	29	25	43	14
Capital Outlay Construction	95	-	95	-	119	24
Capital Outlay Right-of-Way and Others	10	-	10	7	13	3
Project Reserve	0	-	0	-	11	11
TOTAL	134	-	134	32	186	52

Note: Details may not sum to totals due to rounding effects. \$9.6 million in ACTA funds included under Capital Outlay Construction. \$3.7 million included in Capital Outlay Construction for separate landscape contract.

Interstate 880/State Route 92 Interchange Schedule Summary

Project	Baseline Project Completion Date	Forecast Project Completion Date	Variance (Months)
I-880/SR-92 Interchange Reconstruction	November 2010	December 2010	1

Project Status: Caltrans continues work on the preparation of the PS&E package with 100% completion scheduled for January 10, 2006. Design work was delayed due to resolution of utility conflicts, and design and construction staging refinements. Caltrans is pursuing offsite wetland mitigation due to 1) limited areas within the project limits that is suitable to accommodate the wetland mitigation ratio of 3:1 required the Water Board and 2) no maintenance. Additional right of way funds will be required to pay for off-site wetland mitigation. Right-of-way acquisition is in progress. Right of way from approximately 50% of the 72 residential/commercial parcels, currently identified, has been acquired. Condemnation might be necessary to accommodate two utility easements. Demolition of 10 of the 12 homes is scheduled to begin in December 2005. The remaining 2 homes may be sold with proceeds going back into the project. Contract package is scheduled to be advertised by August 2006 and start of construction in November 2006.

Project Issues:

Issue	Mitigating Action
Later than anticipated approval of the environmental clearance documents has delayed project delivery by 14 months. This delay among other reasons has contributed to an increase in estimated costs due to escalation.	BATA and Caltrans will perform a complete re-evaluation of the schedule impact with the issuance of the 100% PS&E, and will also determine work-around options that would mitigate the delay to the project. BATA will also review the entire project cost with the 100% PS&E.
The forecast schedule includes an aggressive schedule for right-of-way acquisition that provides for 18 months to clear numerous parcels in the project area.	The impact of right-of-way acquisitions on the schedule will be determined during the previously mentioned schedule assessment. The construction contract will be advertised with an A+B specification, which could reduce the construction duration and recover the project schedule.
Condemnation might be necessary to accommodate two utility easements that would delay the project schedule by several months.	The maximum monetary offer allowed by law would be made to the prospective property owners in order to avoid condemnation proceedings.

Regional Measure 1 Program

Other Completed Regional Measure 1 (RM1) Projects

Summary Description: Other completed Regional Measure 1 projects are the following: (a) Widen the San Mateo-Hayward Bridge along its low-trestle section and its eastern approach, (b) Widen the Bayfront Expressway (SR 84) from the Dumbarton Bridge to the U.S. 101/Marsh Road interchange, (c) Construct an eastern approach (Richmond Parkway) between the Richmond-San Rafael Bridge and Interstate 80 near Pinole, and (d) Modify the U.S. 101/University Avenue interchange.

Other Completed RM1 Projects Cost Summary (\$Millions)

Contract	June 2005 BATA Budget	Approved Changes	Current Budget	Cost To Date (09/2005)	Estimate at Completion	Variance
a	b	c	d = b + c	e	f	g = f - d
San Mateo-Hayward Bridge Widening Project	218	-	218	209	212	(6)
Bayfront Expressway Widening Project	35	-	35	33	34	(1)
Richmond Parkway Project	6	-	6	4	6	-
Others	4	-	4	4	4	-
TOTAL	263	-	263	250	256	(7)

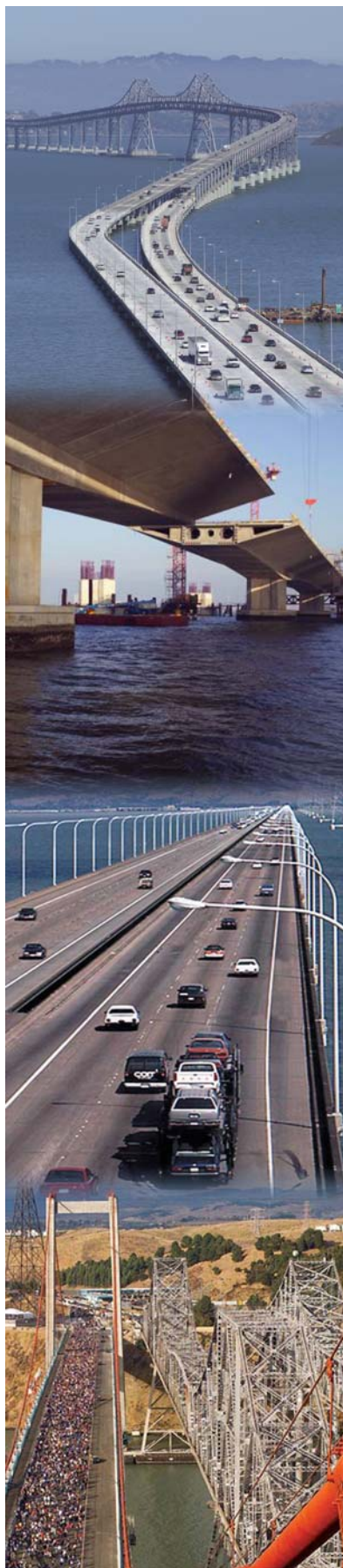
Schedule Summary

Project	Actual Project Completion Date
Richmond Parkway Project	May 2001
San Mateo-Hayward Bridge Widening Project	February 2003
Bayfront Expressway Widening Project	January 2004
Other	April 2004

Project Status: Construction has been completed on the above listed contracts.

Project Issues: None.

**This Page
Intentionally
Left Blank**



APPENDICES

- A** Toll Bridge Seismic Retrofit Program:
San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost
Detail
- B** Toll Bridge Seismic Retrofit Program Cost Detail
- C** Toll Bridge Seismic Retrofit Program Summary Schedule
- D** Regional Measure 1 Program Cost Detail
- E** Regional Measure 1 Program Summary Schedule

Appendix A: Toll Bridge Seismic Retrofit Program (\$Millions)

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail

Contract	EA Number	AB 144 Budget	Approved Changes	Current Budget	Actual Cost To Date (09/2005)	Estimate at Completion	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
San Francisco-Oakland Bay Bridge East Span Replacement Project							
East Span - Skyway	01202X						
Capital Outlay Support		197	-	197	113	197	-
Capital Outlay Construction		1,293	-	1,293	911	1,293	-
Total		1,490	-	1,490	1,024	1,490	-
East Span - SAS Superstructure	0120FX						
Capital Outlay Support		215	-	215	14	215	-
Capital Outlay Construction		1,754	-	1,754	-	1,767	13
Total		1,969	-	1,969	14	1,982	13
East Span - SAS E2/T1 Foundations	0120EX						
Capital Outlay Support		53	-	53	7	53	-
Capital Outlay Construction		314	-	314	66	314	-
Total		367	-	367	73	367	-
SAS W2 Foundations	0120CX						
Capital Outlay Support		10	-	10	9	10	-
Capital Outlay Construction		26	-	26	26	26	-
Total		36	-	36	35	36	-
YBI Transition Structures	0120PX						
Capital Outlay Support		79	-	79	7	79	-
Capital Outlay Construction		299	-	299	-	318	19
Total		378	-	378	7	397	19
Oakland Touchdown	01204X						
Capital Outlay Support		74	-	74	19	92	18
Capital Outlay Construction		284	-	284	-	273	(11)
Total		358	-	358	19	365	7
YBI South/South Detour	0120RX						
Capital Outlay Support		30	-	30	13	30	-
Capital Outlay Construction		132	-	132	28	134	2
Total		162	-	162	41	164	2
Existing Bridge Demolition	01209X						
Capital Outlay Support		80	-	80	0	80	-
Capital Outlay Construction		239	-	239	-	222	(17)
Total		319	-	319	-	302	(17)
YBI/SAS Archeology	01207X						
Capital Outlay Support		1	-	1	1	1	-
Capital Outlay Construction		1	-	1	1	1	-
Total		2	-	2	2	2	-

Note: Details may not sum to totals due to rounding

Appendix A: Toll Bridge Seismic Retrofit Program (\$Millions)

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail (Cont.)

Contract	EA Number	AB 144 Budget	Approved Changes	Current Budget	Actual Cost To Date (09/2005)	Estimate at Completion	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
YBI - USCG Road Relocation	0120QX						
Capital Outlay Support		3	-	3	3	3	-
Capital Outlay Construction		3	-	3	3	3	-
Total		6	-	6	6	6	-
YBI - Substation and Viaduct	0120GX						
Capital Outlay Support		7	-	7	6	7	-
Capital Outlay Construction		12	-	12	11	12	-
Total		19	-	19	17	19	-
Oakland Geofill	01205X						
Capital Outlay Support		2	-	2	2	2	-
Capital Outlay Construction		8	-	8	8	8	-
Total		10	-	10	10	10	-
Pile Installation Demonstration Project	01208X						
Capital Outlay Support		2	-	2	2	2	-
Capital Outlay Construction		9	-	9	9	9	-
Total		11	-	11	11	11	-
Stormwater Treatment Measures	0120JX						
Capital Outlay Support		6	-	6	4	6	-
Capital Outlay Construction		15	-	15	-	15	-
Total		21	-	21	4	21	-
Right-of-Way and Environmental Mitigation	0120X9						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay & Right-of-Way		72	-	72	39	72	-
Total		72	-	72	39	72	-
Sunk Cost - Existing East Span Retrofit	04343X & 04300X						
Capital Outlay Support		39	-	39	39	39	-
Capital Outlay Construction		31	-	31	31	31	-
Total		70	-	70	70	70	-
Other Capital Outlay Support							
Environmental Phase		98	-	98	98	98	-
Pre-Split Project Expenditures		45	-	45	45	45	-
Non-project Specific Costs		20	-	20	3	20	-
Total		163	-	163	146	163	-
Subtotal East Span Capital Outlay Support		960	-	960	385	977	17
Subtotal East Span Capital Outlay Construction & Sunk Costs		4,492	-	4,492	1,132	4,499	7
Other Budgeted Capital		35	-	35	-	11	(24)
Total SFOBB East Span Replacement Project		5,487	-	5,487	1,517	5,487	-

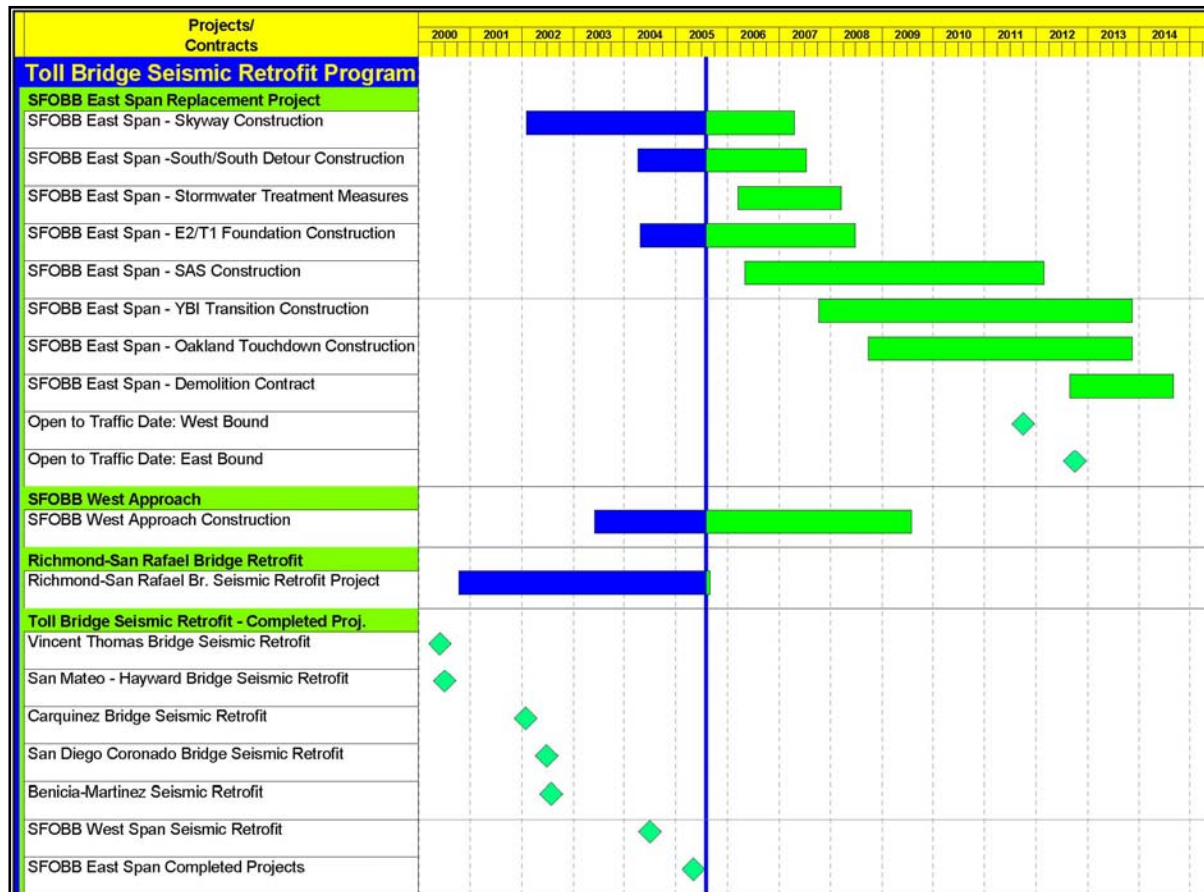
Note: Details may not sum to totals due to rounding

Appendix B: Toll Bridge Seismic Retrofit Program Cost Detail (\$Millions)

Project	AB 144 Budget	Approved Changes	Current Budget	Actual Cost To Date (09/2005)	Estimate at Completion	At-Completion Variance
a	c	d	e = c + d	f	g	h = g - e
SFOBB East Span Replacement Project						
Capital Outlay Support	960	-	960	385	977	17
Capital Outlay Construction	4,492	-	4,492	1,132	4,499	7
Other Budgeted Capital	35	-	35	-	11	(24)
Total	5,487	-	5,487	1,517	5,487	-
SFOBB West Approach Replacement						
Capital Outlay Support	120	-	120	68	120	-
Capital Outlay Construction	309	-	309	157	309	-
Total	429	-	429	225	429	-
SFOBB West Span Retrofit						
Capital Outlay Support	75	-	75	75	75	-
Capital Outlay Construction	233	-	233	230	233	-
Total	308	-	308	305	308	-
Richmond-San Rafael Bridge Retrofit						
Capital Outlay Support	134	-	134	122	127	(7)
Capital Outlay Construction	780	-	780	657	698	(82)
Project Reserves	-	-	-	-	89	89
Total	914	-	914	779	914	-
Benicia-Martinez Bridge Retrofit						
Capital Outlay Support	38	-	38	38	38	-
Capital Outlay Construction	140	-	140	140	140	-
Total	178	-	178	178	178	-
Carquinez Bridge Retrofit						
Capital Outlay Support	29	-	29	29	29	-
Capital Outlay Construction	85	-	85	85	85	-
Total	114	-	114	114	114	-
San Mateo-Hayward Bridge Retrofit						
Capital Outlay Support	28	-	28	28	28	-
Capital Outlay Construction	135	-	135	135	135	-
Total	163	-	163	163	163	-
Vincent Thomas Bridge Retrofit (Los Angeles)						
Capital Outlay Support	16	-	16	16	16	-
Capital Outlay Construction	42	-	42	42	42	-
Total	58	-	58	58	58	-
San Diego-Coronado Bridge Retrofit						
Capital Outlay Support	34	-	34	33	34	-
Capital Outlay Construction	70	-	70	69	70	-
Total	104	-	104	102	104	-
Subtotal TBSRP Capital Outlay Support	1,434	-	1,434	794	1,444	10
Subtotal TBSRP Capital Outlay & Sunk Costs	6,287	-	6,287	2,648	6,211	(76)
Subtotal Other Budgeted Capital	35	-	35	-	11	(24)
Miscellaneous Program Costs	30	-	30	25	30	-
Subtotal Toll Bridge Seismic Retrofit Program	7,786	-	7,786	3,466	7,696	(90)
Project Reserves	-	-	-	-	89	89
Program Contingency	900	-	900	-	900	-
Total Toll Bridge Seismic Retrofit Program	8,685	-	8,685	3,467	8,685	-

Note: Details may not sum to totals due to rounding

Appendix C: Toll Bridge Seismic Retrofit Program Summary Schedule



Appendix D: Regional Measure 1 Program Cost Detail (\$Millions)

Project	EA Number	June 2005 Budget	Approved Changes	Current Budget	Actual Cost To Date (09/2005)	Estimate at Completion	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
New Benicia-Martinez Bridge Project							
New Bridge	00603_						
Capital Outlay Support		85	-	85	67	98	13
Capital Outlay Construction				-			-
BATA Funding		662	-	662	535	774	112
Non-BATA Funding		10	-	10	14	10	-
Subtotal		672	-	672	549	784	112
Total		757	-	757	616	882	125
I-680/I-780 Interchange Reconstruction							
	00606_						
Capital Outlay Support							
BATA Funding		25	-	25	25	27	2
Non-BATA Funding		1	-	1	5	1	-
Subtotal		26	-	26	30	28	2
Capital Outlay Construction							
BATA Funding		55	-	55	55	70	15
Non-BATA Funding		22	-	22	12	22	-
Subtotal		77	-	77	67	92	15
Total		103	-	103	97	120	17
I-680/Marina Vista Interchange Reconstruction							
	00605_						
Capital Outlay Support		18	-	18	19	21	3
Capital Outlay Construction		52	-	52	50	55	3
Total		70	-	70	69	76	6
New Toll Plaza and Administration Building							
	00604_						
Capital Outlay Support		12	-	12	13	14	2
Capital Outlay Construction		24	-	24	18	26	2
Total		36	-	36	31	40	4
Other Contracts							
	See note below						
Capital Outlay Support		16	-	16	8	17	1
Capital Outlay Construction		38	-	38	15	48	10
Capital Outlay Right-of-Way		20	-	20	12	20	-
Total		74	-	74	35	85	11
Subtotal BATA Capital Outlay Support		156	-	156	132	177	21
Subtotal BATA Capital Outlay Construction		831	-	831	672	973	142
Subtotal Capital Outlay Right-of-Way		20	-	20	12	20	-
Subtotal Non-BATA Capital Outlay Support		1	-	1	5	1	-
Subtotal Non-BATA Capital Outlay Construction		32	-	32	26	32	-
Project Reserves		20	-	20	-	60	40
Total New Benicia-Martinez Bridge Project		1,060	-	1,060	847	1,263	203

Notes:

Includes EA's 00601_, 00608_, 00609_, 0060A_, 0060C_, 0060E_, 0060F_, 0060G_, and 0060H_ and all Project Right-of-Way

Note: Details may not sum to totals due to rounding

Appendix D: Regional Measure 1 Program Cost Detail (\$Millions) (Cont.)

Project	EA Number	June 2005 Budget	Approved Changes	Current Budget	Actual Cost To Date (09/2005)	Estimate at Completion	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
Carquinez Bridge Replacement Project							
New Bridge	01301_						
Capital Outlay Support		60	-	60	60	62	2
Capital Outlay Construction		253	-	253	253	256	3
Total		313	-	313	313	318	5
Crockett Interchange Reconstruction	01305_						
Capital Outlay Support		32	-	32	32	32	-
Capital Outlay Construction		74	-	74	72	74	-
Total		106	-	106	104	106	-
Existing 1927 Bridge Demolition	01309_						
Capital Outlay Support		16	-	16	7	16	-
Capital Outlay Construction		35	-	35	6	35	-
Total		51	-	51	13	51	-
Other Contracts	See note below						
Capital Outlay Support		16	-	16	14	15	(1)
Capital Outlay Construction		19	-	19	15	18	(1)
Capital Outlay Right-of-Way		10	-	10	10	10	-
Total		45	-	45	39	43	(2)
Subtotal BATA Capital Outlay Support		124	-	124	113	125	1
Subtotal BATA Capital Outlay Construction		381	-	381	345	383	2
Subtotal Capital Outlay Right-of-Way		10	-	10	10	10	-
Project Reserves		12	-	12	-	9	(3)
Total Carquinez Bridge Replacement Project		528	-	528	468	528	-

Notes:

Other Contracts includes EA's 01302_, 01303_, 01304_, 01306_, 01307_, 01308_, 0130A_, 0130C_, 0130D_, 0130F_, 0130G_, 0130H_, 0130J_, 00453_, 00493_, 04700_, 00607_, 2A270_, and 29920_ and all Project Right-of-Way

Note: Details may not sum to totals due to rounding

Appendix D: Regional Measure 1 Program Cost Detail (\$Millions) (Cont.)

Project	EA Number	June 2005 Budget	Approved Changes	Current Budget	Actual Cost To Date (09/2005)	Estimate at Completion	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation	See note ¹ below						
Capital Outlay Support							
BATA Funding		2	-	2	1	2	-
Non-BATA Funding		9	-	9	11	11	2
Subtotal		11	-	11	12	13	2
Capital Outlay Construction							
BATA Funding		40	-	40	33	33	(7)
Non-BATA Funding		51	-	51	50	51	-
Subtotal		91	-	91	83	84	(7)
Project Reserves		-	-	-	-	-	-
Total		102	-	102	95	97	(5)
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	04152_						
Capital Outlay Support							
BATA Funding		4	-	4	1	4	-
Non-BATA Funding		4	-	4	-	4	-
Subtotal		8	-	8	1	8	-
Capital Outlay Construction		17	-	17	-	21	4
Project Reserves		0	-	0	-	0	-
Total		25	-	25	1	29	4
Richmond Parkway Project (RM 1 Share Only)	Non-Caltrans						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		6	-	6	4	6	-
Total		6	-	6	4	6	-
San Mateo-Hayward Bridge Widening	See note ² below						
Capital Outlay Support		35	-	35	34	35	-
Capital Outlay Construction		180	-	180	174	176	(4)
Capital Outlay Right-of-Way		2	-	2	1	1	(1)
Project Reserves		1	-	1	-	1	-
Total		218	-	218	209	212	(6)
I-880/SR-92 Interchange Reconstruction	EA's 23317_, 01601_, and 01602_						
Capital Outlay Support		29	-	29	25	43	14
Capital Outlay Construction							
BATA Funding		85	-	85	-	109	24
Non-BATA Funding		10	-	10	-	10	-
Subtotal		95	-	95	-	119	24
Capital Outlay Right-of-Way		10	-	10	7	13	3
Project Reserves		0	-	0	-	11	11
Total		134	-	134	32	186	52
Bayfront Expressway Widening	EA's 00487_, 01511_, and 01512_						
Capital Outlay Support		9	-	9	8	8	-
Capital Outlay Construction		26	-	26	25	26	-
Project Reserves		0	-	0	0	0	-
Total		35	-	35	33	34	-
US 101/University Avenue Interchange Modification	Non-Caltrans						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		4	-	4	4	4	-
Total		4	-	4	4	4	-
Subtotal BATA Capital Outlay Support		358	-	358	315	394	36
Subtotal BATA Capital Outlay Construction		1,571	-	1,571	1,257	1,732	161
Subtotal Capital Outlay Right-of-Way		42	-	42	30	44	2
Subtotal Non-BATA Capital Outlay Support		14	-	14	16	16	2
Subtotal Non-BATA Capital Outlay Construction		92	-	92	75	92	-
Project Reserves		34	-	34	0	81	47
Total RM1 Program		2,112	-	2,112	1,693	2,360	248

Notes:

¹ Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRA Expenses for EA 0438U_ and 04157_

² San Mateo-Hayward Bridge Widening Includes EA's 00305_, 04501_, 04502_, 04503_, 04504_, 04505_, 04506_, 04507_, 04508_, 04509_, 27740_, 27790_, 04860_

Note: Details may not sum to totals due to rounding

Appendix E: Regional Measure 1 Program Summary Schedule



The following information is provided in accordance with California Government code Section 7550:

This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs. The contract value for the monitoring efforts, technical analysis, and field site works that contribute to these reports, as well as the report preparation and production, is \$1,574,873.